

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A resynchronization device for ~~an Ethernet~~ a network device, said network device including a transmitter and a receiver, said resynchronization device comprising:

a detector that detects faulty code groups received by ~~[[the]]~~ said receiver;

a counter that counts said faulty code groups that are detected during a predetermined period; and

a resynchronization trigger that asserts a resynchronization signal if said counter exceeds a predetermined threshold greater than 1 during said predetermined period,

wherein said faulty code groups include idle code groups that match idle code groups generated by said transmitter of said network device.

2. (Currently Amended) The resynchronization device of claim 1, wherein said faulty code groups include false carriers.

3. (Currently Amended) The resynchronization device of claim 2, wherein said false carriers include non-idle code groups other than frame delimiters.

4. (Cancelled).

5. (Currently Amended) The resynchronization device of claim 1, wherein said resynchronization signal is a loc_rcvr_status signal.

6. (Currently Amended) The resynchronization device of claim 5, wherein said loc_rcvr_status signal is forced to a first state when said counter exceeds said predetermined threshold during said predetermined period.

7. (Currently Amended) The resynchronization device of claim 1, wherein ~~[[the]]~~said network device is compliant with IEEE section 802.3ab.

8. (Currently Amended) The resynchronization device of claim 1, wherein said resynchronization trigger counts a number of times that said resynchronization signal is asserted without bringing down a link.

9. (Currently Amended) The resynchronization device of claim 8, wherein said resynchronization trigger does not assert said resynchronization signal when said resynchronization signal count reaches a predetermined number.

10. (Currently Amended) The resynchronization device of claim 4, further comprising a timer that times said predetermined period,

wherein at least one of said timer and said count of said matching idle code groups is reset when non-matching idle code groups are received.

11. (Currently Amended) A false carrier resynchronization device for ~~an Ethernet~~ a network device, said network device including a transmitter and a receiver, said false carrier resynchronization device comprising:

a false carrier detector that detects false carriers received by ~~[[the]]~~ said receiver;

a counter that counts said false carriers that are detected by said false carrier detector during a predetermined period; and

a resynchronization trigger that asserts a resynchronization signal if said counter exceeds a predetermined threshold during said predetermined period,

wherein said resynchronization trigger counts a number of times that said resynchronization signal is asserted.

12. (Currently Amended) The false carrier resynchronization device of claim 11, wherein said false carriers include non-idle code groups other than frame delimiters.

13. (Currently Amended) The false carrier resynchronization device of claim 11, wherein said resynchronization signal is a loc_rcvr_status signal.

14. (Currently Amended) The false carrier resynchronization device of claim 13, wherein said loc_rcvr_status signal is forced to a first state when said counter exceeds said predetermined threshold during said predetermined period.

15. (Currently Amended) The false carrier resynchronization device of claim 11, wherein [[the]]said network device is compliant with IEEE section 802.3ab.

16. (Currently Amended) The false carrier resynchronization device of claim 11, wherein said resynchronization trigger asserts said resynchronization signal a predetermined number of times.

17. (Currently Amended) A descrambler resynchronization device for ~~an Ethernet~~ a network device, said network device including a transmitter and a receiver, said descrambler resynchronization device comprising:

a descrambler detector that detects idle code groups that match idle code groups generated by ~~[[the]]~~ said transmitter of ~~[[the]]~~ said network device;

a counter that counts said matching idle code groups that are detected by said descrambler detector during a predetermined period; and

a resynchronization trigger that asserts a resynchronization signal if said counter exceeds a predetermined threshold during said predetermined period,

wherein said resynchronization trigger counts a number of times that said resynchronization signal is asserted.

18. (Currently Amended) The descrambler resynchronization device of claim 17, further comprising a timer that times said predetermined period,

wherein at least one of said timer and said count of said matching idle code groups is reset when non-matching idle code groups are received.

19. (Currently Amended) The descrambler resynchronization device of claim 17, wherein said resynchronization signal is a loc_rcvr_status signal.

20. (Currently Amended) The descrambler resynchronization device of claim 19, wherein said loc_rcvr_status signal is forced to a first state when said counter exceeds said predetermined threshold during said predetermined period.

21. (Currently Amended) The descrambler resynchronization device of claim 17, wherein ~~[[the]]~~said network device is compliant with IEEE section 802.3ab.

22. (Currently Amended) The descrambler resynchronization device of claim 17, wherein said resynchronization trigger asserts said resynchronization signal a predetermined number of times.

23. (Currently Amended) A resynchronization device for ~~an Ethernet~~ a network device, said network device including a transmitter and a receiver, said resynchronization device comprising:

detecting means for detecting faulty code groups received by ~~[[the]]~~ said receiver;

counting means for counting said faulty code groups that are detected during a predetermined period; and

trigger means for asserting a resynchronization signal if said counting means exceeds a predetermined threshold greater than 1 during said predetermined period,

wherein said faulty code groups include idle code groups that match idle code groups generated by said transmitter of said network device.

24. (Currently Amended) The resynchronization device of claim 23, wherein said faulty code groups include false carriers.

25. (Currently Amended) The resynchronization device of claim 24, wherein said false carriers include non-idle code groups other than frame delimiters.

26. (Cancelled).

27. (Currently Amended) The resynchronization device of claim 23, wherein said resynchronization signal is a loc_rcvr_status signal.

28. (Currently Amended) The resynchronization device of claim 27, wherein said loc_rcvr_status signal is forced to a first state when said counting means exceeds said predetermined threshold during said predetermined period.

29. (Currently Amended) The resynchronization device of claim 23, wherein [[the]]said network device is compliant with IEEE section 802.3ab.

30. (Currently Amended) The resynchronization device of claim 23, wherein said trigger means counts a number of times that said resynchronization signal is asserted without bringing down a link.

31. (Currently Amended) The resynchronization device of claim 30, wherein said trigger means does not assert said resynchronization signal when said resynchronization signal count reaches a predetermined number.

32. (Currently Amended) The resynchronization device of claim 26, further comprising timing means for timing said predetermined period,

wherein at least one of said timing means and said count of said matching idle code groups is reset when non-matching idle code groups are received.

33. (Currently Amended) A false carrier resynchronization device for ~~an Ethernet~~ a network device, said network device including a transmitter and a receiver, said false carrier resynchronization comprising:

false carrier detecting means for detecting false carriers received by ~~[[the]]~~ said receiver;

counting means for counting said false carriers that are detected by said false carrier detecting means during a predetermined period; and

trigger means for asserting a resynchronization signal if said counting means exceeds a predetermined threshold during said predetermined period,

wherein said trigger means counts a number of times that said resynchronization signal is asserted.

34. (Currently Amended) The false carrier resynchronization device of claim 33, wherein said false carriers include non-idle code groups other than frame delimiters.

35. (Currently Amended) The false carrier resynchronization device of claim 33, wherein said resynchronization signal is a loc_rcvr_status signal.

36. (Currently Amended) The false carrier resynchronization device of claim 35, wherein said loc_rcvr_status signal is forced to a first state when said counting means exceeds said predetermined threshold during said predetermined period.

37. (Currently Amended) The false carrier resynchronization device of claim 33, wherein [[the]]said network device is compliant with IEEE section 802.3ab.

38. (Currently Amended) The false carrier resynchronization device of claim 33, wherein said trigger means asserts said resynchronization signal a predetermined number of times.

39. (Currently Amended) A descrambler resynchronization device for ~~an Ethernet~~a network device, said network device including a transmitter and a receiver, said resynchronization device comprising:

descrambler detecting means for detecting idle code groups that match idle code groups generated by ~~[[the]]~~said transmitter of ~~[[the]]~~said network device;

counting means for counting said matching idle code groups that are detected by said descrambler detecting means during a predetermined period; and

trigger means for asserting a resynchronization signal if said counting means exceeds a predetermined threshold during said predetermined period.

40. (Currently Amended) The descrambler resynchronization device of claim 39, further comprising timing means for timing said predetermined period,

wherein at least one of said timing means and said count of said matching idle code groups is reset when non-matching idle code groups are received.

41. (Currently Amended) The descrambler resynchronization device of claim 39, wherein said resynchronization signal is a loc_rcvr_status signal.

42. (Currently Amended) The descrambler resynchronization device of claim 41, wherein said loc_rcvr_status signal is forced to a first state when said counting means exceeds said predetermined threshold during said predetermined period.

43. (Currently Amended) The descrambler resynchronization device of claim 39, wherein [[the]]said network device is compliant with IEEE section 802.3ab.

44. (Currently Amended) The descrambler resynchronization device of claim 39, wherein said trigger means asserts said resynchronization signal a predetermined number of times.

45. (Currently Amended) A method for resynchronizing ~~an Ethernet~~ a network device, said network device including a transmitter and a receiver, said method comprising:

detecting faulty code groups received by [[the]]said receiver;

counting said faulty code groups that are detected during a predetermined period; and

asserting a resynchronization signal if said count exceeds a predetermined threshold greater than 1 during said predetermined period,

wherein said faulty code groups include idle code groups that match idle code groups generated by said transmitter of said network device.

46. (Currently Amended) The method of claim 45, wherein said faulty code groups include false carriers.

47. (Currently Amended) The method of claim 46, wherein said false carriers include non-idle code groups other than frame delimiters.

48. (Cancelled).

49. (Currently Amended) The method of claim 45, wherein said resynchronization signal is a loc_rcvr_status signal.

50. (Currently Amended) The method of claim 49, further comprising forcing said loc_rcvr_status signal to a first state when said count exceeds said predetermined threshold during said predetermined period.

51. (Currently Amended) The method of claim 45, wherein [[the]]said network device is compliant with IEEE section 802.3ab.

52. (Currently Amended) The method of claim 45, further comprising counting a number of times that said resynchronization signal is asserted without bringing down a link.

53. (Currently Amended) The method of claim 52, further comprising disabling assertion of said resynchronization signal when said resynchronization signal count reaches a predetermined number.

54. (Currently Amended) The method of claim 48, further comprising resetting at least one of said predetermined period and said count of said matching idle code groups when non-matching idle code groups are received.

55. (Currently Amended) A method for providing false carrier resynchronization in ~~an Ethernet~~a network device, said network device including a transmitter and a receiver, said method comprising:

detecting false carriers received by ~~the~~said receiver;

counting said false carriers that are detected during a predetermined period; ~~and~~

asserting a resynchronization signal if said count exceeds a predetermined threshold during said predetermined period; and

counting a number of times that said resynchronization signal is asserted.

56. (Currently Amended) The method of claim 55, wherein said false carriers include non-idle code groups other than frame delimiters.

57. (Currently Amended) The method of claim 55, wherein said resynchronization signal is a loc_rcvr_status signal.

58. (Currently Amended) The method of claim 57, wherein said loc_rcvr_status signal is forced to a first state when said count exceeds said predetermined threshold during said predetermined period.

59. (Currently Amended) The method of claim 55, wherein [[the]]said network device is compliant with IEEE section 802.3ab.

60. (Currently Amended) The method of claim 55, further comprising asserting said resynchronization signal a predetermined number of times.

61. (Currently Amended) A method for providing descrambler resynchronization in an ~~Ethernet~~ network device, said network device including a transmitter and a receiver, said method comprising:

detecting idle code groups that match idle code groups generated by ~~the~~ said transmitter of ~~the~~ said network device;

counting said matching idle code groups that are detected during a predetermined period; and

asserting a resynchronization signal if said count exceeds a predetermined threshold during said predetermined period.

62. (Currently Amended) The method of claim 61, further comprising resetting at least one of said predetermined period and said count of said matching idle code groups when non-matching idle code groups are received.

63. (Currently Amended) The method of claim 61, wherein said resynchronization signal is a loc_rcvr_status signal.

64. (Currently Amended) The method of claim 63, further comprising forcing said loc_rcvr_status signal to a first state when said count exceeds said predetermined threshold during said predetermined period.

65. (Currently Amended) The method of claim 61, wherein [[the]]said network device is compliant with IEEE section 802.3ab.

66. (Currently Amended) The method of claim 61, further comprising asserting said resynchronization signal a predetermined number of times.

67. (New) The resynchronization device of claim 1, wherein said resynchronization trigger counts a number of times that said resynchronization signal is asserted while maintaining a link between said receiver and another transmitter that transmits data to said network device, and

wherein a physical layer device of said resynchronization device renegotiates said link when said number of times exceeds a predetermined number.

68. (New) The descrambler resynchronization device of claim 17, wherein said resynchronization trigger counts a number

of times that said resynchronization signal is asserted while maintaining a link between said receiver and another transmitter that transmits data to said network device, and

wherein a physical layer device of said descrambler resynchronization device renegotiates said link when said number of times exceeds a predetermined number.